



# State of the Art, Inc.

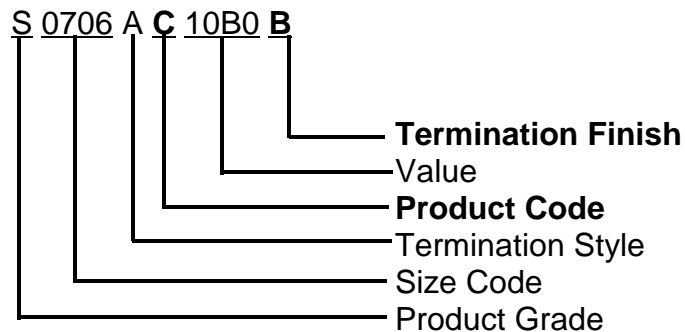
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## Restriction on Hazardous Substances (RoHS) Attenuator Product Compliance

*The European Union's RoHS legislation<sup>1</sup> prohibits the sale of products that contain lead, mercury, cadmium, chromium(VI), polybrominated biphenyls, and polybrominated diphenylethers, unless an end use exemption is granted.*

State of the Art, Inc. (SOTA) attenuators may contain lead, and therefore not be RoHS compliant. Compliance is determined by the termination code identified in the table below.



- Termination finishes **B** and **K** are 60/40 tin lead finishes that are not RoHS compliant.
- Termination finishes **Y** (silver over nickel), and **M** (gold/tin solder bump) are solderable and RoHS compliant.
- Termination finishes **W** is epoxy or wire bondable and is RoHS compliant.
- Product code **D** contains BeO which is not currently on the list of RoHS substances, but there is a proposal to add it to the list in the future.
- Product codes **D** and **W** are thick film devices and contain lead in the glass which is exempt from the regulations<sup>2</sup>.

### Future Termination Finishes:

*As a high reliability resistor manufacturer, SOTA will not provide pure tin terminations due to the potential of tin whisker and tin dendrite formation. SOTA recommends the use of 60/40 tin lead solder for all mission critical high reliability applications. Any new termination finish developed by SOTA will be assigned a new termination finish code.*

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<sup>1</sup> Directive 2002/95/EC of the European Parliament and the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

<sup>2</sup> Lead in the glass of electronic components is exempted from the requirements of Article 4(1) by application 5 in the annex to RoHS.